

## Hay Stocks

**Dry hay** stored on Wisconsin farms as of May 1, 2016, was estimated at 810,000 tons, an increase of 11 percent from May 2015. Disappearance from December 1, 2015 – May 1, 2016, totaled 2.09 million tons, down 6 percent from the 2.23 million tons for the same period a year earlier.

**All hay** stored on United States farms as of May 1, 2016, totaled 25.1 million tons, up 3 percent from a year ago. Disappearance between December 1, 2015 and May 1, 2016 totaled 69.9 million tons, compared with 67.5 million tons for the same period a year earlier.

May 1 hay stocks were up slightly from the previous year as mild winter conditions throughout most of the Nation did not extend supplemental feeding.

### Hay Stocks on Farms – Wisconsin and United States: December 1 and May 1, 2014-2016

State	December 1		May 1	
	2014	2015	2015	2016
	1,000 tons			
<b>Wisconsin</b>	<b>2,960</b>	<b>2,900</b>	<b>730</b>	<b>810</b>
<b>United States</b>	<b>92,052</b>	<b>94,993</b>	<b>24,517</b>	<b>25,140</b>

## Winter Wheat

**Winter wheat** production in Wisconsin is forecast at 20.5 million bushels, 32 percent above last year's 15.5 million bushels. Based on conditions as of May 1, the State's winter wheat yield is forecast at 76 bushels per acre, an increase of 2 bushels per acre from last year. If realized, this will be Wisconsin's second highest winter wheat yield, behind the record high of 78 bushels per acre set in 2006. Wisconsin winter wheat growers intend to harvest 270,000 acres for grain, up 29 percent from 2015.

Nationally, winter wheat production is forecast at 1.43 billion bushels, up 4 percent from 2015. As of May 1, the United States yield is forecast at 47.8 bushels per acre, up 5.3 bushels from last year. If realized, this will equal the record yield set in 1999.

The estimates in this report are based on May 1 conditions and do not reflect weather effects since that time. The next crop production forecast, based on conditions as of June 1, will be released on June 10.

### May 23, 2016 - Vol. 16, No. 10

#### Inside This Issue:

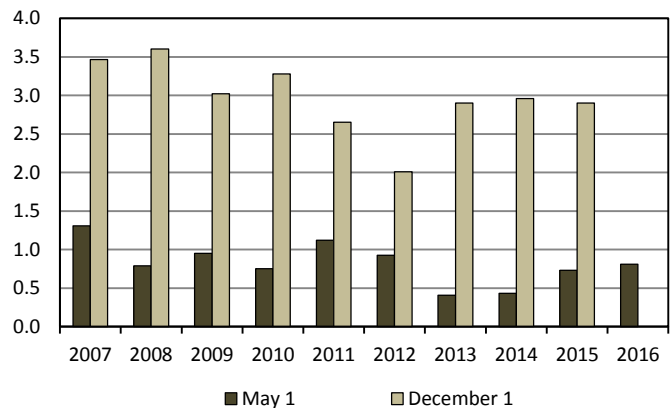
- Hay Stocks
- Winter Wheat
- Cattle County Estimates, January 1, 2016
- Farm Labor
- Honey Bee Colonies

*This Farm Reporter contains the results from the following surveys. Thanks for your help!*

Ag Yield Survey  
Farm Labor Survey  
Quarterly & Annual Colony Loss Surveys

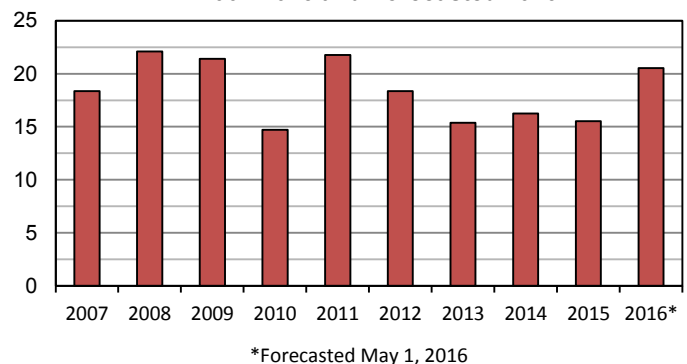
Million  
Tons

### Hay, On-Farm Stocks, Wisconsin, 2007-2016



Million  
Bushels

### Winter Wheat Production, Wisconsin, 2007-2015 and Forecasted 2016



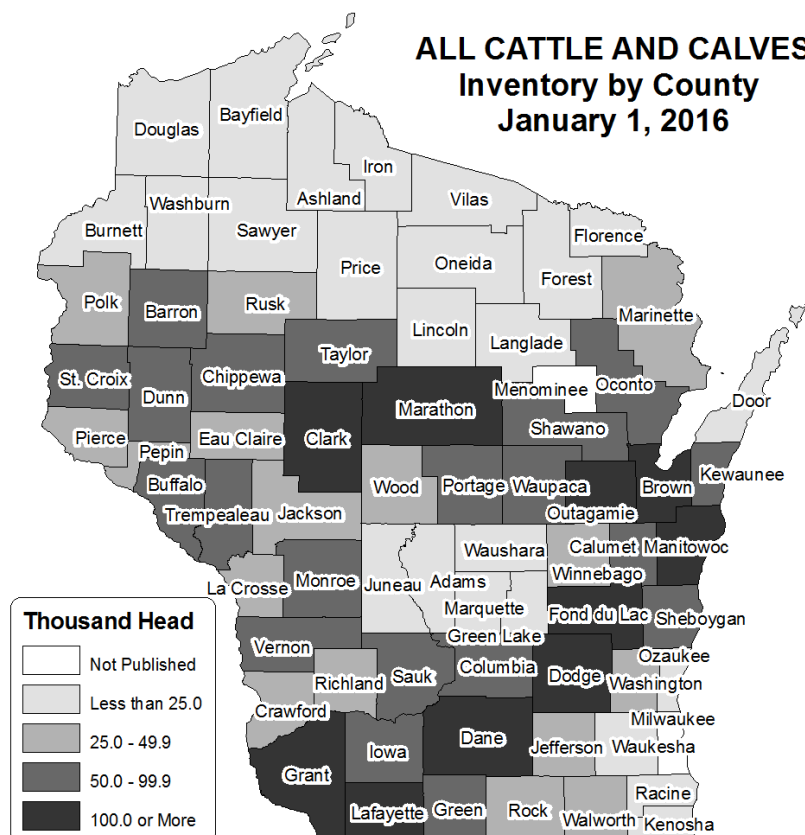
\*Forecasted May 1, 2016

### Winter Wheat Area Harvested, Yield, and Production – Wisconsin and United States: 2015 and Forecasted May 1, 2016

State	Area harvested		Yield per acre		Production	
	2015	2016	2015	2016	2015	2016
	1,000 acres		bushels		1,000 bushels	
<b>Wisconsin</b> .....	<b>210</b>	<b>270</b>	<b>74</b>	<b>76</b>	<b>15,540</b>	<b>20,520</b>
<b>United States</b> .....	<b>32,257</b>	<b>29,831</b>	<b>42.5</b>	<b>47.8</b>	<b>1,370,188</b>	<b>1,427,084</b>

## All Cattle and Calves: by County, Wisconsin, January 1, 2015-2016

County	2015	2016	County	2015	2016	County	2015	2016
Head			Head			Head		
<b>Northwest</b>			<b>West Central</b>			<b>Southwest</b>		
Barron	61,000	61,000	Buffalo	65,000	65,000	Crawford	32,500	32,500
Bayfield	7,600	7,600	Dunn	63,000	63,000	Grant	175,000	175,000
Burnett	11,600	11,600	Eau Claire	32,000	32,000	Iowa	91,000	91,000
Chippewa	72,000	72,000	Jackson	44,000	44,000	Lafayette	110,000	110,000
Douglas	6,800	6,800	La Crosse	26,500	26,500	Richland	43,500	43,500
Polk	42,500	42,500	Monroe	69,000	69,000	Sauk	81,000	81,000
Rusk	29,500	29,500	Pepin	28,000	28,000	Vernon	69,000	69,000
Sawyer	6,900	6,900	Pierce	47,500	47,000	<b>South Central</b>		
Washburn	8,400	8,400	St Croix	50,000	50,000	Columbia	52,000	52,000
<b>North Central</b>			Trempealeau	60,000	60,000	Dane	135,000	135,000
Ashland	7,500	7,400	<b>Central</b>			Dodge	100,000	100,000
Clark	160,000	160,000	Adams	17,800	18,400	Green	73,000	73,000
Iron	1,900	1,900	Green Lake	23,500	23,500	Jefferson	40,000	40,000
Lincoln	12,100	12,100	Juneau	24,500	24,500	Rock	45,500	45,500
Marathon	145,000	145,000	Marquette	14,400	14,400	<b>Southeast</b>		
Oneida	600	600	Portage	50,000	50,000	Kenosha	11,300	11,300
Price	15,100	15,100	Waupaca	53,000	53,000	Milwaukee	(D)	(D)
Taylor	51,000	51,000	Waushara	13,800	13,800	Ozaukee	18,300	18,300
Vilas	100	100	Wood	43,000	43,000	Racine	9,000	9,000
<b>Northeast</b>			<b>East Central</b>			Walworth	38,000	38,000
Florence	800	800	Brown	125,000	125,000	Washington	42,500	42,500
Forest	2,000	2,000	Calumet	72,000	72,000	Waukesha	8,500	8,500
Langlade	19,900	19,900	Door	23,500	23,500	<b>Other Counties</b>		
Marinette	38,500	38,500	Fond Du Lac	125,000	125,000		100	100
Menominee	(D)	(D)	Kewaunee	97,000	97,000	<b>Wisconsin</b>		
Oconto	54,000	54,000	Manitowoc	110,000	110,000		3,500,000	3,500,000
Shawano	87,000	87,000	Outagamie	100,000	100,000	(D) Withheld to avoid disclosure of individual		
			Sheboygan	70,000	70,000	operations. Included in 'other counties.' 1/ Live-		
			Winnebago	35,500	35,500	stock county estimates are being set using raking.		
						This process utilizes county level livestock infor-		
						mation from the census of agriculture, adminis-		
						trative data, and current year state-level Agricul-		
						tural statistics Board (ASB) inventory and produc-		
						tion estimates. Full details on this new methodol-		
						ogy are available at: <a href="http://www.nass.usda.gov/Data_and_Statistics/County_Data_Files/Livestock_County_Estimates/">www.nass.usda.gov/</a>		
						Data_and_Statistics/County_Data_Files/		
						Livestock_County_Estimates/		

ALL CATTLE AND CALVES  
Inventory by County  
January 1, 2016

(D) Withheld to avoid disclosure of individual operations. Included in 'other counties.' 1/ Live-stock county estimates are being set using raking. This process utilizes county level livestock information from the census of agriculture, administrative data, and current year state-level Agricultural statistics Board (ASB) inventory and production estimates. Full details on this new methodology are available at: [www.nass.usda.gov/Data\\_and\\_Statistics/County\\_Data\\_Files/Livestock\\_County\\_Estimates/](http://www.nass.usda.gov/Data_and_Statistics/County_Data_Files/Livestock_County_Estimates/)

## Farm Labor

There were 47,000 workers hired directly by farms in the Lake Region (Michigan, Minnesota, and Wisconsin) during the reference week of January 10-16, 2016. Farm operators paid their hired workers an average wage rate of \$12.59 per hour, down \$0.28 from January 2015. The number of hours worked averaged 34.6 for hired workers during the reference week, compared with 36.5 hours in January 2015.

During the reference week of April 10-16, 2016, there were 58,000 workers hired directly by farms in the Lake Region (Michigan, Minnesota, and Wisconsin). Farm operators paid their hired workers an average wage rate of \$12.31 per hour during the April 2016 reference week, down \$0.36 from April 2015. The number of hours worked averaged 36.6 for hired workers during the reference week, down from 37.1 hours in April 2015.

There were 703,000 workers hired directly by farm operators on the Nation's farms and ranches during the week of April 10-16, 2016, up 2 percent from the April 2015 reference week. Workers hired directly by farm operators numbered 582,000 during the week of January 10-16, 2016, up 6 percent from the January 2015 reference week.

Farm operators paid their hired workers an average wage of \$12.75 per hour during the April 2016 reference week, up 4 percent from the April 2015 reference week. Field workers received an average of \$12.00 per hour, an increase of 6 percent. Livestock workers earned \$12.01 per hour, up 4 percent. The field and livestock worker combined wage rate, at \$12.00 per hour, was up 5 percent from the 2015 reference week. Hired laborers worked an average of 40.4 hours during the April 2016 reference week, compared with 39.9 hours worked during the April 2015 reference week.

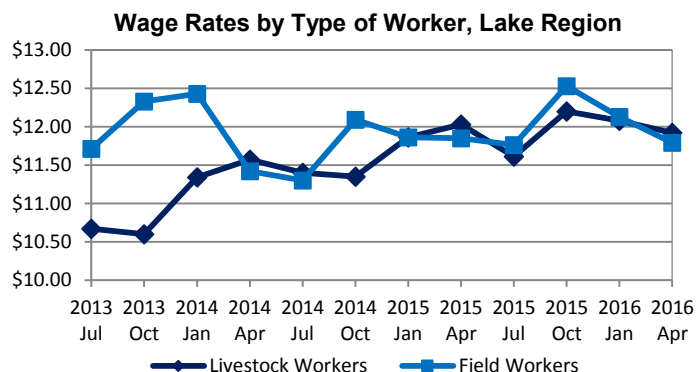
Farm operators paid their hired workers an average wage of \$12.83 per hour during the January 2016 reference week, up 2 percent from the January 2015 reference week. Field workers received an average of \$11.84 per hour, up 4 percent, while livestock workers earned \$12.02 per hour, up 3 percent from a year earlier. The field and livestock worker combined wage rate, at \$11.91 per hour, was up 3 percent from the January 2015 reference week. Hired laborers worked an average of 38.8 hours during the January 2016 reference week, compared with 39.2 hours worked during the January 2015 reference week.

For the April 2016 reference week, the largest percentage increases in the number of hired workers from the 2015 reference week occurred in the Cornbelt I (Illinois, Indiana, and Ohio), Lake (Michigan, Minnesota, and Wisconsin), and Pacific (Oregon and Washington) regions. The Cornbelt I region saw the largest increase, with 31 percent more workers on the region's farms.

The largest percentage decreases in the number of hired workers from the 2015 reference week occurred in the Appalachian I (North Carolina and Virginia), Appalachian II (Kentucky, Tennessee, and West Virginia), and Cornbelt II (Iowa and Missouri) regions. Appalachian II saw the biggest decline, with workers down 23 percent from the 2015 reference week. The largest percentage increases in average wage rates for all hired workers occurred in the Florida, Cornbelt II (Iowa and Missouri) and Mountain III (Arizona and New Mexico) regions.

For the January 2016 reference week, the largest percentage increases in the number of hired workers from the 2015 reference week occurred in the Cornbelt I (Illinois, Indiana, and Ohio), Lake (Michigan, Minnesota, and Wisconsin), and Northeast II (Delaware, Maryland, New Jersey, and Pennsylvania) regions. The Cornbelt I region saw the largest increase, with 35 percent more workers on the region's farms.

The largest percentage decreases in the number of hired workers from the 2015 reference week occurred in the Appalachian I (North Carolina and Virginia), Appalachian II (Kentucky, Tennessee, and West Virginia), and Cornbelt II (Iowa and Missouri) regions. Appalachian II saw the biggest decline, with workers down 25 percent from the 2015 reference week. The largest percentage increases in average wage rates for all hired workers occurred in the California and Mountain III (Arizona and New Mexico) regions.



**Hired Workers and Wage Rates – Lake Region and United States: 2015-2016**

		Lake Region <sup>1</sup>			United States		
		April 2015	January 2016	April 2016	April 2015	January 2016	April 2016
Hired Workers on Farms	1,000 workers	47	47	58	687	582	703
Hours worked by Hired Workers	hrs/wk	37.1	34.6	36.6	39.9	38.8	40.4
Wage Rate by Work Type <sup>2</sup>							
Field	\$/hr	11.95	12.10	11.85	11.43	11.91	12.00
Livestock	\$/hr	11.85	12.13	11.79	11.36	11.84	12.00
Field & Livestock	\$/hr	12.03	12.08	11.92	11.58	12.02	12.01
All Hired Workers	\$/hr	12.67	12.59	12.31	12.28	12.83	12.75

1 The Lake Region includes Michigan, Minnesota, and Wisconsin. 2 Benefits, such as housing and meals, are provided to some workers but the values are not included in the wage rates.

## Honey Bee Colonies

### Wisconsin

Honey bee colonies for operations with 5 or more colonies in Wisconsin as of January 1, 2016 totaled 22.0 thousand colonies. This is 33 percent above the 16.5 thousand colonies on January 1, 2015. During 2015, honey bee colonies on April 1, July 1, and October 1 were 25.0 thousand, 60.0 thousand, and 48.0 thousand, respectively. The quarter of April-June 2015 had the largest maximum number of colonies, with 65.0 thousand, while January-March 2016 had the smallest maximum number of colonies with 23.0 thousand.

Honey bee colonies lost for operations with 5 or more colonies during the quarter of January-March 2016 was 2,900, 64 percent fewer than 8,000 lost during the same quarter the year before. The quarter of July-September 2015 had a loss of 9,000 colonies or 15 percent of the maximum colonies, the highest honey bee colony loss of the 5 quarters. The quarter April-June 2015, at 7 percent or 4,600 colonies, showed the smallest percent lost.

Varroa mites were the number one stressor for operations with 5 or more colonies during all 5 quarters surveyed. The quarter of January-March 2016 showed varroa mites affected 22.0 percent of Wisconsin's honey bee colonies. The quarter of October-December 2015 showed the highest percentage affected by varroa mites at 49.4 percent.

### United States

Honey bee colonies for operations with five or more colonies in the United States as of January 1, 2016 totaled 2.59 million. This is 8 percent below the 2.82 million colonies on January 1, 2015. During 2015, honey bee colonies on April 1, July 1, and October 1 were 2.85 million, 3.13 million, and 2.87 million, respectively. Honey bee colonies lost for operations with five or more colonies during the quarter of January-March 2016, was 429 thousand colonies or 17 percent lost. The quarter of January-March 2015 had a loss of 500 thousand colonies or 18 percent, the highest honey bee colonies loss of the five quarters. The quarter of April-June 2015, at 353 thousand or 12 percent, showed the least amount of lost honey bee colonies.

Varroa mites were the number one stressor for operations with five or more colonies during each of the quarters surveyed. The quarter of January-March 2016 showed varroa mites at 34.3 percent. The quarter of April-June 2015 showed the highest percentage of varroa mites at 43.4 percent affected.

Colonies with loss reported that met all of the following criteria: 1) Little to no build-up of dead bees in the hive or at the hive entrance 2) Rapid loss of adult honey bee population despite the presence of queen, capped brood, and food reserves 3) Absence or delayed robbing of the food reserves 4) Loss not attributable to varroa or nosema loads, peaked at 114 thousand colonies lost during January-March 2016. That same quarter a year ago showed 92.3 thousand colonies lost.

**Honey Bee Colonies on Operations with Five or More Colonies– Wisconsin: 2015-2016**

	First of the quarter number of colonies <sup>1</sup>	Maximum colonies <sup>2</sup>	Lost colonies	Percent lost <sup>3</sup>	Added colonies	Renovated colonies <sup>4</sup>	Percent reno- vated <sup>5</sup>
	Number			Percent	Number		Percent
Jan-Mar 2015	16,500	29,000	8,000	28	3,100	2,500	9
Apr-Jun 2015	25,000	65,000	4,600	7	10,000	5,500	9
Jul-Sep 2015	60,000	62,000	9,000	15	1,300	4,300	7
Oct-Dec 2015	48,000	48,000	6,500	14	210	10	(Z)
Jan-Mar 2016	22,000	23,000	2,900	13	530	-	-

- Represents zero. (Z) Less than half of the unit shown. 1. Number of colonies in the state as of the first day of the quarter. 2. Number of colonies in the state on the first day of the quarter plus all colonies moved into state during the quarter. 3. Percent lost is the number of lost colonies divided by the maximum colonies. 4. Defined as any surviving colony that was requeened or received new honey bees through nuc or package. 5. Percent renovated is the number of renovated colonies divided by the maximum colonies.

**Honey Bee Colony Health – Wisconsin: 2015-2016 <sup>1</sup>**

	Varroa mites	Other pests and parasites <sup>2</sup>	Disease <sup>3</sup>	Pesticide	Other <sup>4</sup>	Unknown
	(percent)					
Jan-Mar 2015	18.8	1.6	2.7	8.5	8.3	5.8
Apr-Jun 2015	35.3	5.6	1.0	8.2	15.2	2.3
Jul-Sep 2015	47.3	20.1	8.3	20.9	12.6	13.5
Oct-Dec 2015	49.4	15.6	2.5	21.9	6.6	21.4
Jan-Mar 2016	22.0	1.5	1.0	12.2	8.8	9.4

(Z) Less than half of the unit shown. 1. Operations with 5 or more colonies, percent of colonies affected by stressor. A colony may be affected by multiple stressors. 2. Tracheal mites, nosea, hive beetle, wax moths, etc. 3. Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sabrood, IAPV, Lake Sinai II, etc. 4. Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.



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